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Obituaries

J.C. Morrell; patents aided U.S. in 2 wars

By Kenan Heise

Jacque C. Morrell, 92, a resident of Oak Park from the 1920s to the 1940s, held more than 250 patents in the petroleum field, including those for making synthetic rubber, TNT and absorbents in gas masks.

Mr. Morrell, a retired air force colonel, was buried March 26 with full military honors in Arlington National Cemetery, Arlington, Va. He died March 20 in Bethesda Naval Hospital in Washington.

Mr. Morrell, a native of Savannah, Ga., earned a bachelor of science degree from Cooper Institute in New York City and master's and doctorate degrees in chemistry from Columbia University.

During World War I, he served as master engineer in the Chemical Warfare Service.

Because of the heavy use of gas warfare, there was a shortage of charred coconut shells, the material used as absorbents in gas masks. Housewives and children were encouraged to save peach pits as a substitute because of the difficulty in shipping coconuts. Mr. Morrell discovered a way of making absorbents from wood and coal, which made available a vir-

tually unlimited supply.

From 1921 to 1942, he was associate director of research, head of the patent department and in charge of field refining problems at Universal Oil Products Co. in Chicago.

During that time he lived in Oak Park, where both he and his wife, Mildred, were active in the community.

In June, 1940, Mr. Morrell announced that along with Aristid Grosse and Julian Mavity he had developed a process that was hailed as "the missing link in the making of synthetic rubber."

The Germans and Russians had developed an expensive five-step process of making butadiene, which is used in making synthetic rubber. Mr. Morrell cut it to one step and made possible unlimited synthetic rubber, which was one of the most crucial war materials in World War II.

At the same time, he developed a process to produce TNT, trinitrotoluene, from coal tar. The new process made it possible for the U.S. to manufacture 88 billion tons as easily as it had produced 3 billion tons.

During World War II, Mr.



Jacque Morrell

Morrell served in Washington as commanding officer of the military unit of the Petroleum Administration for War and as chief of the development division of the Chemical Warfare Service.

From 1945 to 1948, he was executive vice president of Bowman Gum Inc. in Philadelphia. From 1949 to 1957, he was chief of staff for intelligence research and analysis for the Central Intelligence Agency.

Survivors, besides his wife, include a daughter, Doris Leader; a son, Roger; five granddaughters; and two great-grandchildren.